CLAIMS

1. A weldable ring stud fastener comprising:

a fastener head having a first head thickness;

an annular weldment area having a second head thickness, said second head thickness being less than the first head thickness, said annular weldment area having a first exterior radius and said head has an exterior wall having a second exterior radius equal to the first exterior radius;

a solid cylindrical body having an exterior surface, a portion of the exterior surface being threaded.

2. The weldable fastener according to Claim 1 wherein said shank comprises a weakened section position adjacent to said head.

3. A weldable ring stud fastener comprising:

a fastener head having a first head thickness greater than 1.5 mm;

an annular weldment area having a second head thickness, the

second head thickness is about 20% to about 35% of the first thickness, said

annular weldment area having a first exterior radius and said head has an

exterior wall having a second exterior radius equal to the first exterior radius:

a solid cylindrical body having an exterior surface having an

exterior radius less than the first exterior radius, a portion of the exterior surface

being threaded.

4. An automotive, stud to structure construction comprising:

a metal laminate comprising a polymer layer;

a fastener head having a first head thickness and a web portion;

an annular weldment area having a second head thickness, said

second head thickness being less than the first head thickness, said annular

weldment area having a first exterior radius and said head has an exterior wall

having a second exterior radius equal to the first exterior radius:

a solid cylindrical shank having an exterior surface, a portion of the

exterior surface being threaded;

an annular weldment disposed between and coupling the weldable

fastener to the metal laminate.

25

5. The stud to structure construction according to Claim 4 configured such that the shank has a first failure load, and the web has a second failure load greater than the first failure load and wherein the annular weldment has a third failure load greater than the first failure load.

- 6. The stud to structure construction according to Claim 4 wherein the laminate comprises first and second metallic layers, said polymer layer being disposed between the first and second layers.
- 7. The stud to structure construction according to Claim 4 wherein the weldment is partially disposed between the first and second metallic layers.

8. A weld stud comprising:

a longitudinally elongated solid threaded shank;

a laterally enlarged head extending from an end of the shank, said head having a first thickness is greater than 1.5 mm; and

a substantially annular section longitudinally extending from the head opposite the shank, the annular section having a second thickness being less than the first thickness; and

wherein a welding edge of the annular section is substantially flat along a lateral plane substantially parallel to a lateral plane of the head, prior to welding and wherein said head has an exterior wall having a first exterior radius and said annular weldment area has a second exterior radius equal to the first exterior radius.

- 9. The weldable fastener according to Claim 8 wherein said shank comprises a weakened section position adjacent to said head.
- 10. The weldable fastener according to Claim 8 wherein the second thickness is about 20% to about 35% of the first thickness.